

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	: Peter Richardson	Art Unit	: 1623
Serial No.	: 10/537,564	Examiner	: Lawrence E. Crane, Ph.D.
Filed	: August 28, 2006	Conf. No.	: 4551
Title	: USE OF SPONGOSINE FOR THE TREATMENT OF PAIN		

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request. A copy of a communication from a foreign patent office in a PCT application PCT/GB2003/005379 is also enclosed.

The Examiner's attention is brought to Applicant's U.S. Applications Serial No. 10/547,454, filed June 28, 2006, Serial No. 10/547,455, filed July 26, 2006, Serial No. 10/547,462, filed October 26, 2006, and Serial No. 10/598,520, filed September 1, 2006.

The late submission fee under §1.17(p) in the amount of \$180 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06 1050.

Respectfully submitted,

Date: Aug 2, 2007

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Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 13425-170US1	Application No. 10/537,564
	Applicant Peter Richardson		
	Filing Date August 28, 2006	Group Art Unit 1623	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	3,936,439	02/03/1976	Marumoto, <i>et al.</i>			
	AB	4,225,591	09/30/1980	Marumoto, <i>et al.</i>			
	AC	4,255,565	03/10/1981	Marumoto, <i>et al.</i>			
	AD	4,705,758	11/10/1987	Bruns			
	AE	5,877,180	03/02/1999	Linden, <i>et al.</i>			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AF	AU 49412/72	05/30/1974	Australia				
	AG	DE 2258378	06/14/1973	Germany			Corresponding to AU 4941272	
	AH	FR 2162128	07/13/1973	France			Corresponding to AU 4941272	
	AI	WO 199638728	12/05/1996	WIPO				
	AJ	WO 199934804	07/15/1999	WIPO				
	AK	WO 2004079329	09/16/2004	WIPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AL	"Aldrich Handbook of Fine Chemicals and Laboratory Equipment," 1015-1016, (2000); XP002366927.
	AM	Askalan, R. et al., "Role of Histidine Residues in the Adenosine A2A Receptor Ligand Binding Site," <i>Journal of Neurochemistry</i> , 63(4):1477-84, (1994); XP001196996.
	AN	Bartlett, R. et al., "Synthesis and Pharmacological Evaluation of a Series of Analogues of 1-Methylisoguanosine," <i>Journal of Medicinal Chemistry</i> , 24:947-54, (1981); XP002225573.
	AO	Belardinelli, L. & Isenberg, G., "Isolated Atrial Myocytes: Adenosine and Acetylcholine Increase Potassium Conductance," <i>The American Journal of Physiology</i> , 224:H734-H737, (1983).
	AP	Belfrage, M. et al., "The Safety and Efficacy of Intrathecal Adenosine in Patients with Chronic Neuropathic Pain," <i>Anesthesia and Analgesia</i> , 89(1):136-42, (1999); XP009027670.
	AQ	Bhakuni, D., "Biological Activity of Marine Nucleosides and their Analogues," <i>Proceedings of the Indian National Science Academy. Part B Biological Sciences</i> , 65(Part 2):97-112, (1995); XP001165752.
	AR	Bressi, J. et al., "Adenosine Analogues as Inhibitors of Trypanosoma Brucei Phosphoglycerate Kinase: Elucidation of a Novel Binding Mode for a 2-Amino-N6-Substituted Adenosine," <i>Journal of Medicinal Chemistry</i> , 43(22):4135-50, (2000); XP000999137.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 13425-170US1	Application No. 10/537,564
Information Disclosure Statement by Applicant (Use several sheets if necessary)		Applicant Peter Richardson	
		Filing Date August 28, 2006	Group Art Unit 1623
(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)

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	AS	Collins, S. et al., "The Effect of GR190178, a Selective Low-Efficacy Adenosine A1 Receptor Agonist, on the Treatment of Neuropathic Hyperalgesia in the Rat," <i>British Journal of Pharmacology</i> , 133(Proceedings Supplement):48p (2001), Proceedings of the British Pharmacological Society Meeting, (Dec. 18-21, 2000); XP009027671.
	AT	Daly, J. et al., "Structure-Activity Relationships for N6-Substituted Adenosines at a Brain A1-Adenosine Receptor with a Comparison to an A2-Adenosine Receptor Regulating Coronary Blood Flow," <i>Biochemical Pharmacology</i> , 35(15):2467-81 (1986) XP009010090
	AU	Dan, K., "Nerve Block Therapy and Postherpetic Neuralgia," <i>Critical Reviews in Physical and Rehabilitation Medicine</i> , 7(2):93-112 (1995) Embase Database Accession No. EMB-1995373280. XP002273335
	AV	De Zwart, M. et al., "5'-N-Substituted Carboxamidoadenosines as Agonists for Adenosine Receptors," <i>Journal of Medicinal Chemistry</i> , 42(8): 1384-92 (1999) XP001002032
	AW	Deghati, P. et al., "Regioselective Nitration of Purine Nucleosides: Synthesis of 2-Nitroadenosine and 2-Nitroinosine," <i>Tetrahedron Letters</i> , 41(8):1291-5 (2000) XP004188609
	AX	Feoktistov, I. et al., "Adenosine A2B Receptors: A Novel Therapeutic Target in Asthma?," <i>Trends in Pharmacological Sciences</i> , 19(4):148-53 (1998) XP002287445
	AY	Fishman, P. et al., "A3 Adenosine Receptor as a Target for Cancer Therapy," <i>Anti-Cancer Drugs</i> , 13(5):437-43 (2002) XP009024520
	AZ	Hiley, C. et al., "Effects of pH on Responses to Adenosine, CGS 21680, Carbachol and Nitroprusside in the Isolated Perfused Superior Mesenteric Arterial Bed of the Rat," <i>British Journal of Pharmacology</i> , 116(6):2641-2646 (1995) XP008032448
	AAA	Jiang, Q. et al., "Mutagenesis Reveals Structure-Activity Parallels Between Human A2A Adenosine Receptors and Biogenic Amine G Protein-Coupled Receptors," <i>Journal of Medicinal Chemistry</i> , 40(16):2588-95 (1997) XP002287314
	ABB	Kaul, P. et al., "Adenosine Agonist of Marine Origin Indicative of Two Types of Adenosinergic Receptors," <i>Pharmacologist</i> , 23(3):540 (1981) XP009027638
	ACC	Keeling, S. et al., "The Discovery and Synthesis of Highly Potent, A2a Receptor Agonists," <i>Bioorganic and Medicinal Chemistry Letters</i> , 10(4):403-6 (2000) XP004189943
	ADD	Kirk, I. et al., "Further Characterization of [3H]-CGS 21680 Binding Sites in the Rat Striatum and Cortex," <i>British Journal of Pharmacology</i> , 114(2):537-43 (1995) XP008032472
	AEE	Klitgaard, H. et al., "Contrasting Effects of Adenosine A ₁ and A ₂ Receptor Ligands in Different Chemoconclusive Rodent Models," <i>European Journal of Pharmacology</i> , 242:221-8 (1993)
	AFF	Knabb, R. et al., "Consistent Parallel Relationships Among Myocardial Oxygen Consumption, Coronary Blood Flow, and Pericardial Infusate Adenosine Concentration with Various Interventions and Beta-Blockade in the Dog," <i>Circulation Research</i> , 53:33-41 (1983)
	AGG	König, G., "Meeresorganismen als Quelle Pharmazeutisch Bedeutsamer Naturstoffe," <i>Deutsche Apotheker Zeitung</i> , 132(14):673-83 (1992) XP002255617
	AHH	Marumoto, R. et al. "Synthesis and Coronary Vasodilating Activity of 2-Substituted Adenosines," <i>Chemical and Pharmaceutical Bulletin</i> , 23(4):759-74 (1975) XP002154408
	AII	Matova, M. et al. "QSAR Analysis of 2-Alkyloxy and 2-Aralkyloxy Adenosine A1- and A2-Agonists," <i>European Journal of Medicinal Chemistry</i> , 32(6):505-13 (1997) XP004088461
	AJJ	Matsuda et al., Nucleosides and Nucleotides. XXVII. Synthesis of 2- and 8-Cyanoadenosines and their Derivatives," <i>Chemical and Pharmaceutical Bulletin</i> , 27(1):183-92 (1979) XP002127436

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Other Documents (include Author, Title, Date, and Place of Publication)		
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	AKK	Matsuda, A. et al., "Nucleosides and Nucleotides. 103. 2-Alkyladenosines: a Novel Class of Selective Adenosine A2 Receptor Agonists with Potent Antihypertensive Effects," <i>Journal of Medicinal Chemistry</i> , 35:241-52 (1992) XP002170995
	ALL	Miles, R. et al., "Nucleic Acid Related Compounds," <i>Journal of the American Chemical Society</i> , 117:5951-7 (1995) XP002366161
	AMM	Nair, V. et al., "Novel, Stable Cogeners of the Antiretroviral Compound 2', 3'-Dideoxyadenosine," <i>Journal of the American Chemical Society</i> , 111(22):8502-4 (1989) XP001105896
	ANN	Ojha, L. et al., "A Simple Method for Synthesis of Spongiosine, Azaspongiosine, and their Antiplatelet Effects," <i>Nucleosides and Nucleotides</i> , 14(9-10):1889-1900 (1995) XP009027643
	AOO	Okusa, M., "A2A Adenosine Receptor: A Novel Therapeutic Target in Renal Disease," <i>American Journal of Physiology</i> , 282(1 Part 2):F10-F18 (2002) XP002287448
	APP	Rieger, J.M. et al., "Design, Synthesis, and Evaluation of Novel A2A Adenosine Receptor Agonists," <i>Journal of Medicinal Chemistry</i> , 44:531-9 (2001) XP002222174
	AQQ	Ribeiro, J. et al., "Adenosine Receptors in the Nervous System: Pathophysiological Implications," <i>Progress in Neurobiology</i> , 68(6):377-92 (2002) XP002287447
	ARR	Sawynok, J., "Adenosine Receptor Activation and Nociception," <i>European Journal of Pharmacology</i> , 317(1):1-11 (1998) XP002273334
	ASS	Schaeffer, H. et al., "Synthesis of Potential Anticancer Agents. XIV. Ribosides of 2, 6-Disubstituted Purines," <i>Journal of the American Chemical Society</i> , 80:3738-42 (1958) XP002300926
	ATT	Smith, J. et al., "The Effects of Reduced pH on A2B Adenosine Receptor-Evoked Cyclic AMP Generation in the Guinea-Pig Cerebral Cortex," <i>British Journal of Pharmacology</i> , 123 (Proc. Suppl.): 195p (1998). Meeting of the British Pharmacological Society Held Jointly with the Dutch Pharmacological Society (Dec. 10-12, 1997) XP008032489
	AUU	Sullivan, G. et al., "Role of A2A Adenosine Receptors in Inflammation," <i>Drug Development Research</i> , 45(3/4):103-12 (1998) XP000978332
	AVV	Ueeda, M. et al., "2-Alkoxyadenosines: Potent and Selective Agonists at the Coronary Artery A2 Adenosine Receptor," <i>Journal of Medicinal Chemistry</i> , 34:1334-9 (1991) XP002225574
	AWW	Ueeda, M. et al., "2-Aralkoxyadenosines: Potent and Selective Agonists at the Coronary Artery A2 Adenosine Receptor," <i>Journal of Medicinal Chemistry</i> , 34(4):1340-4 (1991) XP004088461
	AXX	Umino, T. et al., "Nucleosides and Nucleotides. 200. Reinvestigation of 5'-N-Ethylcarboxamidoadenosine Derivatives: Structure-Activity Relationships for P(3) Purinoceptor-Like Proteins," <i>Journal of Medicinal Chemistry</i> , 44:208-14 (2001) XP002366162
	AYY	Vittori, S. et al., "2-Alkenyl and 2-Alkyl Derivatives of Adenosine and Adenosine-5'-N-Ethyluronamide: Different Affinity and Selectivity of E- and Z-Diastereomers at A2A Adenosine Receptors," <i>Journal of Medicinal Chemistry</i> , 39:4211-7 (1996) XP002366163
	AZZ	Copy of International Search Report for PCT/GB2003/05379, by Examiner S. Allnutt, - dated March 22, 2006.

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